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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,562	12/27/2001	Jae Ho Hyun	50075-087	9888

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EXAMINER
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SWERDLOW, DANIEL

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/026,562

Applicant(s)

HYUN, JAE HO

Examiner

Daniel Swerdlow

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 claims the input/output means includes "an audio set". This recitation has no specific meaning in the art and is not defined in the disclosure. As such, its use renders the claim indefinite. To advance prosecution to the maximum extent possible, examiner makes prior art rejections below based on the interpretation that "an audio set" is intended as an "audio input" as depicted in applicant's Fig. 3.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 through 4 and 6 through 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (US Patent 6,700,956) in view of Yamashita (US Patent 5,615,256).
5. Regarding Claim 1, Chang discloses a computer peripheral module (i.e., an Internet phone interface card having a sound function) taking the form of an internal computer card (Fig.

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4; column 2, line 67 through column 3, line 4) that enables a standard analog telephone to be connected to an Internet-based telephony service (column 2, lines 28-31). Chang further discloses a DTMF interface circuit (Fig. 4, reference 39; column 5, line 67 through column 6, line 4) that monitors for keystroke input from the telephone dial pad to toggle between PSTN and Internet telephony (i.e., a telephone signal detector detecting a state change signal transmitted from a general telephone in order to perform telephonic communication with a telephone connected to the Internet) (column 4, lines 45-49). Chang further discloses a DSP, interface and codec (Fig. 4, reference 37, 38, 42; column 7, lines 41-44) that provide full duplex voice capability to the telephone in an Internet telephony mode (i.e., a signal processing unit receiving a telephonic signal from the telephone connected to the LAN or Internet and transmitting a telephonic signal to listening of a user to the general telephone). Chang further discloses audibly notifying the user of an incoming Internet call and coupling the telephone to receive the call (i.e., a ring signal generator detecting a telephonic signal transmitted from the LAN or Internet, generating a ring signal and transmitting it to the general telephone) (column 10, lines 24-30). Chang further discloses a microprocessor controller (Fig. 4, reference 38; column 4, lines 54-56; column 7, lines 10-12). Therefore, Chang anticipates all elements of Claim 1 except an adjustable sound level at the telephone. Yamashita discloses a device and method for automatically controlling (i.e., adjusting) sound volume (i.e., level) in a communications apparatus (i.e., telephone). Yamashita further discloses that use of the device and method is useful in noisy surroundings (column 2, lines 3-8). It would have been obvious to one skilled in the art at the time of the invention to apply sound level adjustment as taught by Yamashita to the

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interface taught by Chang for the purpose of providing sufficient speech quality in noisy environments.

6. Regarding Claim 2, Chang further discloses switching between analog and Internet operation based on recognition of DTMF tones from keystroke input (i.e., the state change signal is a signal corresponded to a DTMF signal generation state varied according to a dial press) (column 4, lines 45-49).

7. Regarding Claim 3, Chang further discloses a codec (Fig. 4, reference 37; column 9, lines 16-19) that converts speech transmitted and received via the Internet for the analog telephone (i.e. processing an audio signal transmitted/received to/from the telephone connected to the LAN or Internet) and is under the control of the microprocessor (column 7, lines 23-26). Chang further discloses an interface (Fig. 4, reference 38, column 7, line 65 through column 8, line 2) that corresponds to the input/output interface unit claimed and connects the codec to an edge connector (Fig. 4, reference 56) to a computer that corresponds to the input/output means claimed.

8. Regarding Claim 4, Yamashita further discloses setting an optimum sound level (column 2, lines 29-41) using a reference level (i.e., memorizing an audio level).

9. Regarding Claim 6, Chang further discloses a ring detector (Fig. 4, reference 35; column 10, lines 1-4) that informs the interface (i.e., microprocessor) of an incoming PSTN call.

10. Regarding Claim 7, Chang further discloses a two-position switch (i.e., first switch and third switch) (Fig. 4, reference 33) used to switch the telephone (i.e., general telephone) between an Internet call and a PSTN call (column 8, lines 17-29) based on ring detection (column 10, lines 1-4).

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11. Regarding Claim 8, Chang further discloses a switch (i.e., second switch) (Fig. 4, reference 33) that is controlled by the microprocessor and isolates the telephone from incoming ringing of a PSTN call when the interface is in the Internet mode (column 6, lines 12-34).

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Yamashita and further in view of Mousel (Business Wire).

13. Regarding Claim 5, as shown above apropos of Claim 3, the combination of Chang and Yamashita makes obvious all elements except the input output means including a speaker, a microphone, an audio input and a joystick. Mousel discloses a computer sound card including a speaker output, a Mic in (i.e., microphone), a Line in (i.e., audio input) and a joystick port (Abstract: last two lines). Mousel further discloses that this arrangement provides low-cost multimedia capability and accommodates game players. As such, it would have been obvious to one skilled in the art at the time of the invention to apply the input/output means taught by Mousel to the combination made obvious by Chang and Yamashita for the purpose of realizing the aforesaid advantages.

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Yamashita and further in view of Ohtsuka et al. (US Patent 4,870,680).

15. Regarding Claim 9, Chang further discloses putting calls on hold (column 6, lines 62-65). Therefore, the combination of Chang and Yamashita makes obvious all elements except transmitting a holding tone. Ohtsuka discloses sending a holding tone to a held telephone set (column 3, lines 19-20). Ohtsuka further discloses that use of the holding tone informs the other

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party of the hold state and allows the other party to recognize when the hold state is released (column 1, lines 11-20). As such, it would have been obvious to one skilled in the art at the time of the invention to apply the holding tone taught by Ohtsuka to the combination made obvious by Chang and Yamashita for the purpose of realizing the aforesaid advantages.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 703-305-4088. The examiner can normally be reached on Monday through Friday between 8:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forrester Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel Swerdlow, Patent Examiner Art Unit 2644